IMPACT OF MIGRANT VERSUS NONMIGRANT MALE PARTNER ON GENERAL HEALTH AND WELL BEING OF WOMEN IN REPRODUCTIVE AGE GROUP - A DESCRIPTIVE COMPARATIVE STUDY

Synopsis

Submitted for the award of

Degree of

DOCTOR OF PHILOSOPHY IN NURSING

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(Deemed to be University of UGC Act 1956)

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This is to certify that the research work and the thesis on the title **"Impact of migrant versus nonmigrant male partner on general health and wellbeing of women in reproductive age group – A descriptive comparative study"** is done by **Mrs. Bindu C G**, Part time External Scholar (1905002033) as a part of the research work to be submitted to the **SBV University, Puducherry**, as a part of the completion of PhD, has been done under my supervision since September 2020

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DECLARATION BY THE CANDIDATE

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ABSTRACT

A descriptive comparative study was conducted to assess the effects of migrant versus. non-migrant male partners on the general health (physical, mental, and reproductive health) and well-being of women of reproductive age group. **Objectives of the Study were,** 1. To determine the impact of migrant versus. non-migrant male partners on the general health (physical, mental, and reproductive health) and well-being of women of reproductive age group. 2. To examine the correlation between general health and well-being in women of reproductive age group with migrant versus. non-migrant male partners.3. To investigate the relationship between physical, reproductive, and mental health in women of reproductive age group with migrant versus. non-migrant male partners. 4. To explore the association between general health (physical, mental, and reproductive health) and well-being among women of reproductive age group with migrant versus. non-migrant male partners, considering their socio-demographic variables. The study has applied Roy's Adaptation Model. It was conducted among 750 women of reproductive age group, with migrant and non-migrant male partners, from three panchayats in three blocks across three districts of Kerala. A multistage cluster sampling technique was used. Data were collected using a socio-demographic proforma, Physical Health Assessment Questionnaire, Mental Health Assessment (using DASS), Reproductive Health Assessment Questionnaire, Well-being Self-Assessment Scale, and the Norvold Domestic Abuse Questionnaire. Data were analyzed using descriptive and inferential statistics. **Results**; **Physical Health**: The study revealed no significant difference in physical health between women with migrant and non-migrant male partners. Both groups were primarily categorized as mildly unhealthy. **Mental Health**: Significant differences in mental health outcomes were observed between the two groups. Women with non-migrant partners reported higher levels of anxiety, stress, and depression, while those with migrant partners had comparatively lower mental health issues. This finding contradicts traditional assumptions that spousal separation negatively impacts mental health. **Reproductive Health**: Women with non-migrant partners exhibited significantly better reproductive health than those with migrant partners. **Well-being**: Women with migrant partners reported higher levels of overall well-being, driven primarily by financial security and fewer day-to-day conflicts with their partners. In contrast, women with non-migrant partners, although physically present with their spouses, experienced lower levels of well-being. **Conclusion**; It is essential to educate women regarding physical and psychological and reproductive health issues and their management, helping them cope with these challenges effectively.

Keywords: Migrant and non-migrant male partners, general health, reproductive age group, reproductive health

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CHAPTER I
INTRODUCTION

Human migration is the act of moving from one place to another with the intention of residing there either permanently or temporarily (geographic region). Internal migration (moving within a single nation) is also possible and is indeed the most typical kind of human mobility globally[1]. Improvements in human capital, both at the individual and household levels, as well as better access to migratory networks, are typically associated with migration, which could lead to a second move. Age plays a role in both work-related and non-work-related migration. Individuals, families, and big groups of people can all move.[2]

A significant aspect influencing India's socioeconomic development is labour migration. With movements occurring both domestically and globally across borders, it is truly a global phenomenon. By transporting human capital to areas where it is required and facilitating the acquisition of new skills and a higher standard of living, migrants boost the Kerala economy. The process of urbanization has been significantly aided by rural-urban migration.

Male migration trends

Migration has been a pivotal aspect of socio-economic dynamics in India. The movement of male migrants, primarily for employment, has profound impacts on the economy, social structure, and family dynamics. India has witnessed significant internal and international migration, driven by various factors including economic opportunities, social aspirations, and environmental challenges. According to the 2011 Census of India, over 450 million people were classified as migrants, with a substantial proportion being men migrating for work.[3]

Southern states of India, such as Tamil Nadu, Karnataka, Andhra Pradesh, and Kerala, have distinctive migration patterns. These states have not only been significant sources of migrants but also key destinations due to their robust economic growth and industrial development. The migration from Kerala to the Gulf countries began in the 1970s and 1980s, driven by the oil boom and labor demand in the Middle East. Over the decades, this trend has continued, with millions of Keralites working abroad, primarily in countries like the UAE, Saudi Arabia, and Qatar.[4]

Male migration impacts

Male migration from Kerala has profound socio-economic impacts on the families left behind, particularly affecting women. While remittances provide significant economic benefits, they also create dependencies and vulnerabilities. Women experience increased autonomy and responsibility, leading to both empowerment and increased stress. The overall impact on family dynamics, social status, and health highlights the complex interplay of benefits and challenges associated with male migration. The health impacts of male migration on women are mixed. While improved financial conditions can lead to better healthcare access, the increased stress and workload can negatively affect women's health. A study highlighted in the India Migration Report 2020 indicates that the physical and emotional toll of managing households alone can lead to various health issues among women left behind.[5]

One of the most direct effects of male migration is the economic benefit derived from remittances. These remittances play a crucial role in improving the financial stability of households. According to the India Migration Report 2020, remittances have significantly contributed to the economic upliftment of many families in Kerala, enhancing their access to better healthcare, education, and overall living standards.[5]

Male migration in Kerala has been a significant socio-economic phenomenon, with many Keralites moving to other states in India and abroad, especially to Gulf countries. This trend continued after 2016, influenced by various factors including employment opportunities, socio-economic conditions, and changes in policies both in Kerala and destination countries.[6] Migration has been a significant socio-economic phenomenon globally, with far-reaching implications for both the migrants and the communities they leave behind. In the context of Kerala, India, male migration has been particularly prominent, with a large number of men migrating to Gulf countries for better employment opportunities.[6]

Background of the study

Male migration often entails prolonged periods of separation from spouses, which can impact spousal relationships, communication, and reproductive decision-making. Separation-induced stress and loneliness may influence fertility intentions, contraceptive use, and family planning practices. Male migration, both internal and international, has become a significant demographic phenomenon in many countries, including India. Migration often leads to changes in family structures, economic dynamics, and social relationships, which can impact fertility patterns within migrant-sending communities. India is one of the world's largest migrant-sending countries, with millions of men migrating internally from rural to urban areas and internationally to countries such as the Gulf Cooperation Council (GCC) countries, North America, and Europe. Male migration can influence fertility dynamics through various channels, including changes in household composition, economic remittances, separation from spouses, and altered gender roles.[7]

Male migration often leads to temporary or permanent separation of spouses and families, resulting in changes in household composition and dynamics. In the absence of migrant men, women may experience greater autonomy in decision-making regarding family size and reproductive choices. Research evidences shows the impact of male migration on fertility preferences and behaviors among women in rural India, finding that migrant households exhibited lower fertility rates and greater contraceptive use compared to non-migrant households, suggesting the influence of migration on reproductive decision-making.[8]

Kerala, known for its high levels of human development and widespread emigration, provides a unique context for examining the relationship between male migration and fertility. The state has witnessed significant outmigration of men to Gulf countries and other international destinations, leading to changes in socio-economic dynamics and family structures. Male migration influences fertility dynamics in India and Kerala through various pathways, including changes in household composition, economic remittances, and social relationships.[9]

Reproductive health is another critical area affected by male migration. The absence of husbands can delay family planning and lead to longer intervals between births, which might have both positive and negative health implications. While it can reduce health risks associated with closely spaced pregnancies, the lack of spousal support during pregnancy and childbirth can be detrimental.[10]

While remittances can potentially improve access to healthcare, in practice, women might prioritize spending on their children's education and household needs over their own health. This can lead to neglect of their health needs, resulting in poor nutritional status and untreated health issues. Women left behind often experience heightened stress and anxiety due to the increased responsibility of managing the household alone. The absence of their husbands means they must handle all domestic chores, childcare, and financial management. This added burden can be overwhelming, leading to significant psychological stress.[11]

Significance of the study

The health impacts of male migration on women left behind are multifaceted, affecting their economic, psychological, physical, and social well-being. While remittances can improve financial stability and access to resources, the absence of male family members introduces significant challenges. Addressing these impacts requires a comprehensive approach, involving improved healthcare access, robust social support systems, and economic empowerment initiatives. Policymakers and community organizations must work together to support these women, ensuring their health and well-being in the context of male migration

According to world economic forum (2017) illustrated the impact of male out-migration on the reproductive health of women in rural India. Findings suggested that women whose husbands migrated for work faced increased challenges related to reproductive health, including limited access to family planning services, higher rates of unintended pregnancies, and reduced utilization of antenatal and postnatal care.[12] Studies revealed that the Population Council in collaboration with Indian institutions in 2019 investigated the association between male migration and maternal health outcomes in Bihar, India. The study found that women with migrant husbands were more likely to experience adverse maternal health outcomes, such as higher rates of maternal mortality, due to factors including reduced social support, economic strain, and limited access to healthcare services during pregnancy and childbirth.[13]

Research gap

Based on the review of prior researches, there is a empirical and rigorous research gap in the prior literature. Some of these unexplored women's health in terms of physical, mental and reproductive dimensions appeared to be Important and worthy of investigation in the context of impact of migration of their male partner. An empirical investigation of these issues is important because previous studies revealed that left behind wives were depressed 10.57 times more compared to the wives of non-migrants.[14]

Also, these studies focused mainly on single dimensions of health mostly on autonomy and mental health. Present study has directly attempted to empirically evaluate the general health and well-being of left behind wives including physical, mental, sexual and reproductive dimensions.

OBJECTIVES

PRIMARY OBJECTIVES

1.To determine the impact of migrant versus non migrant male partner on general health (physical, mental and reproductive health) and well-being of women of reproductive age group.

2.To correlate the General health with well-being of a women of reproductive age group having migrant versus non migrant male partners

3.To correlate between physical health, reproductive health and mental health of a women of reproductive age group having migrant versus non migrant male partners

4.To associate the general health (physical, mental and reproductive health) and well-being with their socio demographic variables of women of reproductive age group having migrant versus non migrant male partners

SECONDARY OBJECTIVES

1. To assess the impact of migrant versus non-migrant male partner on domestic abuse among women of reproductive age group.

HYPOTHESES

H_1 – There is a significant difference in the general health (physical, mental, and reproductive health) and well-being of women of reproductive age group having migrant and non-migrant male partners.

H_2 – There is a significant correlation between general health and well-being of a women of reproductive age group having migrant and non migrant male partners

H_3 -. There is a significant correlation between physical health, reproductive health and mental health of women of reproductive age group having migrant and non-migrant male partners.

H_4 - There is a significant association between general health (physical, mental, and reproductive health) and well-being with socio demographic variables of women of reproductive age group having migrant and non-migrant male partners

OPERATIONAL DEFINITIONS

1. Impact: - It is a change in general health of women of reproductive age group due to migration of male partner.

2. Migrant male partner: - Migrant male partner is a married man who leaves their female partner and children from the place of origin to another place.

3. Non migrant male partner: - Non migrant male partner is a married man who lives with their female partner and children in the place of origin or another place.

4. General health: - It is a physical, mental, and reproductive health of a women of reproductive age group measured by Physical health questionnaire, DASS and reproductive health questionnaire

4**a. Physical Health:** - It refers to the optimum state of health and well-being in the absence of illness to perform daily activities measured by Physical health questionnaire prepared by researcher

4b.Mental Health: - Refers to the emotional, psychological, and social well-being without stress depression and anxiety measured by DASS

4c.Reproductive health: - Reproductive health is a state of complete well-being in all matters relating to the reproductive system and to its functions and processes like menstruation, pregnancy, labour, postnatal period and absence of disease in reproductive organs measured by questionnaire prepared by researcher

5. Well-being: - It is a state of being comfortable, healthy and happy measured by well-being self-assessment Scale

6. Reproductive age group: - It refers to all women in the age group of 18–50 years

Conceptual framework

Conceptual Framework Based on The Roy's Adaptation Model (1976)

Conceptual framework presents logically constructed concepts to provide general explanation of the relationship between the concepts of the research study, without using a single existing theory. Conceptual framework constructed by using researcher's own experiences, previous research findings or concepts of several theories or models.[15]

Conceptual framework used for this study is Roy's Adaptation Model, developed by Sister Callista Roy (1976). In Roy's model, the human beings have a set of interrelated systems (biological, psychological and social) and strive to maintain a balance between these systems and the outside environment. In this model individual is referred as a bio-physiological adaptive system. The individual and environment are sources of stimuli that require modification to promote adaptation. According to this theory the recipient of care to be an open adaptive system and characteristics of a system includes input, throughput, output, and feedback.[16]

- **Input:** In this theory input is the stimuli and adaptation level of the person. The adaptive system has input from external environment or from the individual itself. Stimuli are consisting of focal, contextual and residual stimuli.
  - **Focal stimuli:** A focal stimulus is "the degree of change or stimulus most immediately confronting the person and the one to which the person must make an adaptive response that is the factor that precipitates the behavior". In the present study focal stimuli is migrant and nonmigrant male partner.
  - **Contextual stimuli:** Contextual stimuli mean "all other stimuli present that contribute to the behavior caused or precipitated by the focal stimuli." In the present study the contextual stimuli include duration of married life, number of children, monthly family income, type of family, ownership of house of women in reproductive age group.
  - **Residual stimuli:** Residual stimuli are "factors that may be affecting behaviour but whose effects are not validated". In the present study residual stimuli includes age, education, religion, residence, and occupation of women in reproductive age group.
- **Throughput:** In this theory throughput includes control process and adaptive modes namely physiological mode, self-concept mode, interdependence mode, and role function mode.

- **Control process:** Control process includes coping mechanism and internal process or subsystem (Regulator and Cognator). Coping mechanism may be innate (inherited) or acquired (learning). Regulator coping process is related to neural, chemical and endocrine control. Cognator coping mechanism is involved four cognitive emotive channels which are perceptual and information processing, learning, judgement and emotion. In the present study, the cognator coping mechanism become active, as women in reproductive age group may learned the situation.
- **Adaptive modes:** The coping processes, cognator – regulator and stabilizer- innovator, promote adaptation in human adaptive systems. Coping processes are not directly observable. Only the responses or behaviours of the person or group can be observed, measured or subjectively reported. Roy has identified four adaptive modes such as Physiological mode, Self-concept mode, Role function mode and Interdependence mode.
  - **Physiological Mode:** The physiological mode represents the human system's physical responses and interaction with the environment. For an individual, the underlying need of this mode is physiologic integrity, which is composed of the basic needs associated with oxygenation, nutrition, elimination, activity, rest and protection. The complex processes of this mode are associated with the senses; fluid, electrolyte and acid base balance; neurological function; and endocrine function.

    In the present study, the physiological mode includes the parameters of physical health such as dietary habit, exercise pattern, BMI, GRBS, Blood pressure, and morbidities.
  - **Self-concept mode:** For an individual, the self-concept mode relates to the basic need for psychic and spiritual integrity or a need to know the self with a sense of unity. Self-concept is central to the person's behavior because it consists of a person's beliefs or feelings about himself or herself at any given time. Self-concept has the components of physical self which includes body sensation and body image and the personal self which includes self-consistency, self-ideal and the moral ethical spiritual self.

In the present study, personal self includes stress, anxiety and depression about looking after household as male partner stays in distance.

- **Role Function mode:** Role function mode is a category of behaviour for both individuals and groups. A role consists of a set of expectations of how a person in a particular position will behave in relation to a person who holds another position. The mode includes cooperating with members of the administration, staff and understanding the commitment to fulfil expected responsibilities.
  In the present study, role function mode is performing household activities, social and community activities, personal care, family care, reproductive health etc
- **Interdependence mode:** Interdependence mode focuses on giving and receiving of love, respect and value with significant others and support systems.
  In the present study interdependence mode is the relationship of women in reproductive age group with family and society.
- **Output:** Output of the person as a system are the responses of the person. Output responses can be both external and internal. Output responses become feedback to the person and environment. Roy has categorized outputs of the system as either adaptive response or ineffective response.
- **Adaptive responses:** These are those that promote the integrity of the person and to meet the goals in terms of survival, growth, reproduction and mastery. Ineffective responses do not support these goals. The stimulus from output goes to feedback mechanism. If it is ineffective response, then stimuli will go back to input of the system.[16]

In the present study, adaptive response refers to the women in reproductive age group remains healthy in terms of physical, mental, reproductive, and feel of well-being. Maladaptive response shows impaired in physical health, mental health, reproductive health and low well-being

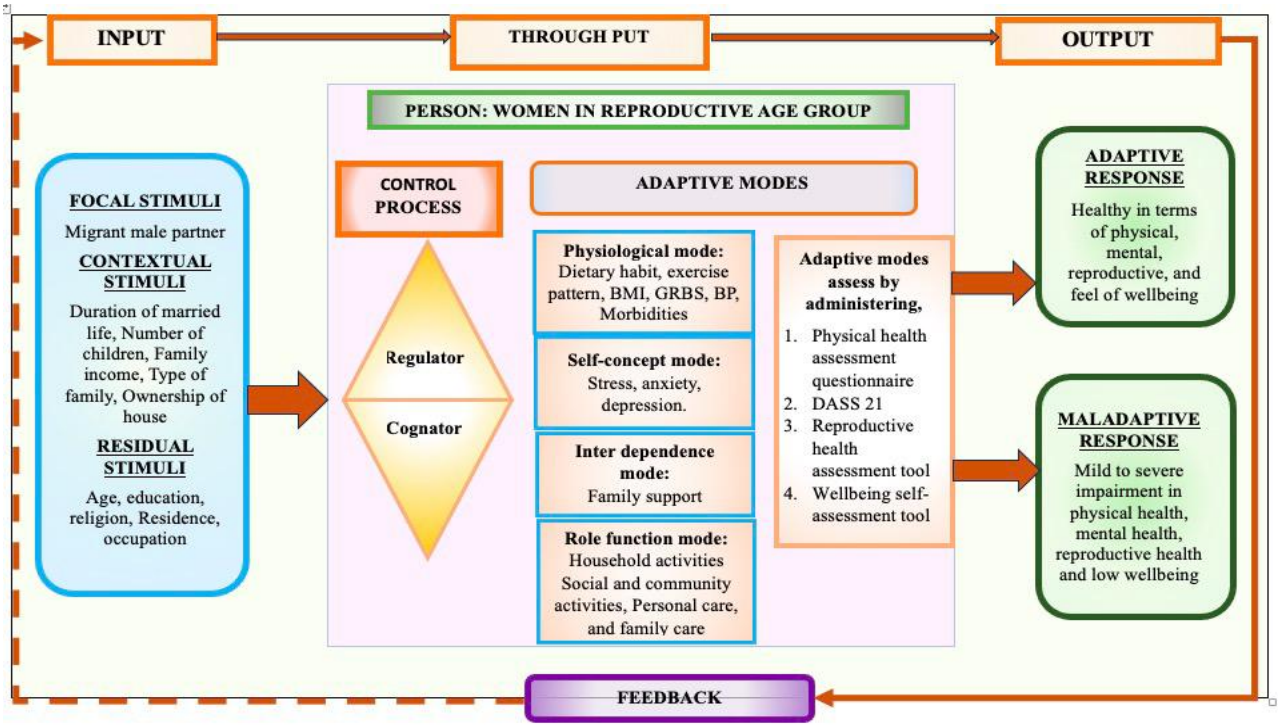
INPUT
THROUGH PUT
OUTPUT
PERSON: WOMEN IN REPRODUCTIVE AGE GROUP
FOCAL STIMULI
Migrant male partner
CONTEXTUAL STIMULI
Duration of married life, Number of children, Family income, Type of family, Ownership of house
RESIDUAL STIMULI
Age, education, religion, Residence, occupation
CONTROL PROCESS
Regulator
Cognator
ADAPTIVE MODES
Physiological mode: Dietary habit, exercise pattern, BMI, GRBS, BP, Morbidities
Self-concept mode: Stress, anxiety, depression.
Inter dependence mode: Family support
Role function mode: Household activities Social and community activities, Personal care, and family care
Adaptive modes assess by administering,
1. Physical health assessment questionnaire
2. DASS 21
3. Reproductive health assessment tool
4. Wellbeing self-assessment tool
ADAPTIVE RESPONSE
Healthy in terms of physical, mental, reproductive, and feel of wellbeing
MALADAPTIVE RESPONSE
Mild to severe impairment in physical health, mental health, reproductive health and low wellbeing
FEEDBACK

FIGURE 1: CONCEPTUAL FRAMEWORK BASED ON ROY'S ADAPTATION MODEL (1976)

CHAPTER II
REVIEW OF LITERATURE

The literature review serves as a crucial component of the research process, encompassing multiple facets to evaluate available data within the context of existing knowledge. Its primary objective is to retrieve and analyse existing evidence related to the problem under investigation, establishing the necessity for the new study. A research literature review entails a written summary that encompasses the current state of evidence regarding the research problem. For the present study, an extensive survey of published studies related to general health and well-being of women in reproductive age group who has migrant versus non-migrant male partner in databases such as Web of Science (WOS), PubMed-Medline, and University Grants Commission (UGC) journals were collected. The research literature was reviewed and organized under the following sections

Section 1: Impact of migrant male partner on general health among women left-behind

The study "Migration and the Health of Non-migrant Family: Findings from the Jamaica Return(ed) Migrants Study" explores the effects of migration on the health of family members who remain in Jamaica, a subject that has received limited research attention. Utilizing data from the 2012 Jamaica Return(ed) Migrants Study (N = 621) and weighted regression models, the research examines the health outcomes of left-behind women (n = 323) and men (n = 298) The findings indicate that women with a child living abroad had lower odds of reporting good mental health compared to those whose children remained in Jamaica (OR = 0.46, 95% CI 0.21, 0.97). Men in similar circumstances reported lower life satisfaction (b = −2.370, p = −3.119, p = 0.039) health when a parent, but not a grandparent, resided abroad. Conversely, men with a migrant spouse or partner reported more physical health symptoms than those whose spouse or partner remained in Jamaica (b = 3.215, p = 0.013). The study concludes that migration has varied health impacts on left-behind family members, potentially straining social relationships.[17]

Section 2: Impact of migrant male partner on reproductive health among women left-behind

The study "Male Labour Migration, Spousal Communication, and STI Treatment in Armenia" seeks to expand the limited research on the relationship between labour migration and sexually transmitted infections (STIs). It builds on previous research that suggests wives of migrants face a higher risk of STIs compared to those married to non-migrants. Using data from a 2007 survey conducted in rural Armenia—a post-Soviet, patriarchal society with significant seasonal male migration and high STI rates—the study examines the impact of migration on spousal communication regarding STIs, and how this communication influences women's likelihood of seeking medical care for STI-like symptoms. The findings from random-intercept logistic regression models indicate that wives of migrants are more likely to discuss STI-related risks with their husbands than those of non-migrants. However, among women who experienced STI-like symptoms in the 12 months preceding the survey, those with migrant husbands were less likely to discuss these symptoms with their spouses. Additionally, the study found that women married to migrants were less likely to seek professional treatment for STI-like symptoms compared to those married to non-migrants. This trend, however, was influenced by the level of communication between the wives and their husbands about the symptoms.[18]

Section 3: Impact of migrant male partner on mental health among women left-behind

The study "Factors Associated with Quality of Life Among Married Women in Rural China: A Cross-Sectional Study" examines how specific health and living conditions in rural

areas can contribute to a lower quality of life. Conducted in the Liaoning Province of rural China, the study surveyed 3,163 married women (81% of the 3,900 invited) using the WHOQOL-BREF scale to assess quality of life. Data on various factors such as monthly income, living conditions, health status, left-behind status, stress levels (measured using the Perceived Stress Scale), and coping strategies (evaluated through the Simplified Coping Style Questionnaire) were gathered through self-reported surveys. Hierarchical multiple regression analysis revealed that older age, chronic illnesses, being left behind by a migrating spouse, marital insecurity, and stress were linked to lower quality of life scores. In contrast, a higher monthly income correlated with better scores. Coping styles appeared to moderate the impact of stress on quality of life. The average quality of life scores for this group were relatively low, with physical health at 14.08 ± 2.27, psychological health at 11.78 ± 2.28, social relationships at 13.07 ± 2.69, and environmental conditions at 12.26 ± 2.67. The study suggests that improving household income, ensuring access to affordable and quality healthcare, supporting better communication between spouses, and encouraging active coping mechanisms could enhance the quality of life for married women in these rural communities.[19]

Section 4: Impact of migrant male partner on well-being among women left-behind.

The study "Spousal Migration and Left-behind Wives' Subjective Well-being in Rural China" utilizes data from the 2010 China Family Panel Studies (CFPS) to address two key research questions related to rural-to-urban migration. The first question explores whether spousal migration impacts the subjective well-being of left-behind wives. The second question investigates whether such migration affects these women's well-being through factors like increased housework, reduced leisure time, or a diminished intimate relationship with their husbands. The preliminary findings reveal that the impact of spousal migration on the well-being of left-behind wives varies. Recent spousal migration is associated with increased depressive symptoms, lower life satisfaction, and reduced confidence in future happiness, whereas long-term spousal migration does not produce the same effects. Additionally, wives whose spouses have migrated and then returned also report higher levels of depressive symptoms. The study suggests that these negative effects are partially due to a loss of intimacy between the spouses. Future research will explore the alternative hypothesis that spousal migration might enhance women's autonomy.[20]

Section 5: Impact of migrant versus non-migrant male partner on the incidence of domestic violence among women

This study investigates the prevalence of intimate partner violence (IPV) among women experiencing infertility, a demographic facing significant public health and human rights challenges. The research underscores the need to understand how the stigma of infertility impacts women's health and social outcomes. A meta-analysis of existing studies was conducted, focusing on factors such as the study period, region, type of infertility, sample size, and methods used to assess IPV. Subgroup analyses and meta-regressions were used to explore variations in IPV prevalence across these factors. The findings revealed a pooled past-year IPV prevalence of 36.0% and a lifetime prevalence of 47.2% among women with infertility. Infertile women were found to be more likely to experience physical and sexual violence compared to fertile women. However, there was no significant difference in the lifetime prevalence of psychological or overall IPV between infertile and fertile women. The study also pointed out that differences in IPV measurement tools and biases in existing studies make comparing prevalence estimates difficult. It calls for more population-based research to provide a clearer understanding of IPV among women with infertility.[21]

CHAPTER III
RESEARCH METHODOLOGY

The research methodology includes the steps and strategies for gathering and analysing the data in a research investigation. Research methodology is a blueprint that the researchers select in order to carry out their research study. The researchers often describe their study design in a concise manner which enables us to summarize complex design structure efficiently in a simple form. This chapter briefly explains the research approach, design, setting of the study, population, sample and sampling technique, data collection technique, research tool, data collection process and plan for data analysis

Research approach

Quantitative approach is used for the study since the primary objective of the study is to assess the impact of migration of male partner on general health and well-being of women of reproductive age group.

Research design

The research design used by the investigator to find out the impact of migration of male partner on general health and well-being of women of reproductive age group was Descriptive comparative research design.

Variables of the study: ***Dependent variables:***

The dependent variables are general health and well-being of women in reproductive age group.

Independent variable:

In the present study, the independent variable is Migration of male partner.

Setting of the study:

The present study conducted in Kerala which is one of the Southern states of India.

Population:

The population of the study are all married women of reproductive age group in Kerala which is the southern state of India.

Sample: The sample of the study are married women of reproductive age group in selected districts of Kerala which is one of the southern states of India and who are meeting the inclusion criteria.

Sample size:

It is calculated by the data from Previous similar study Sample size calculated by using the formula.

$$n = \frac{4pq}{d^2}$$

p= 6.5.

q = 1- p = 1-6.5 = 5.5

d^2 = 10% of p = (0.65)2 = 0.423

$$\frac{4 \times (6.5 \times 5.5)}{0.423} = \frac{143}{0.423} = 338$$

Sample size (N)= 375 in each group.

Sampling technique:

Multistage cluster sampling is found appropriate for the study.

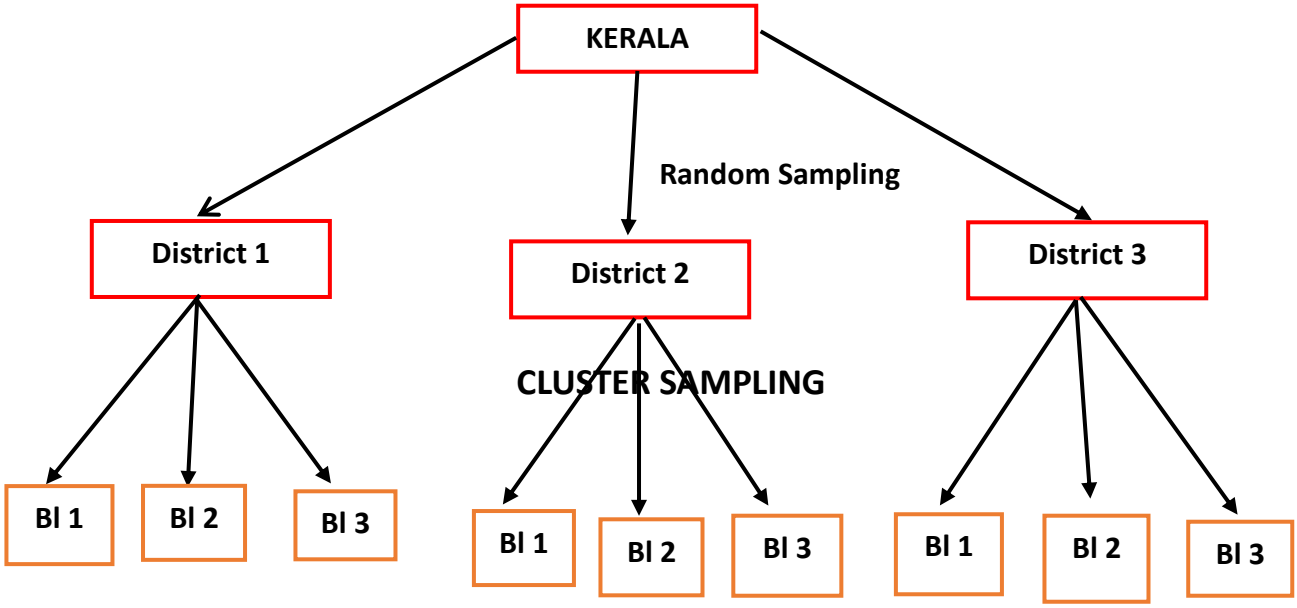

Figure 2: Schematic representation of sampling distribution

Criteria: -

Inclusion criteria:

- The study included all the married women of reproductive age group
- Those women who are willing to participate
- Those women who has been married for 2 years or more

Exclusion criteria:

The study Excluded women:

- having Mental disorders
- widows
- separated from husband.
- who are divorced.
- Having serious diseases other than lifestyle diseases for herself and husband.

e) Tools and technique:

Development / selection of the tools:

The tools used in this study are socio- demographic proforma, physical health assessment questionnaire, Mental health assessment tool, reproductive health assessment questionnaire, NorVold Domestic Abuse Questionnaire (NORAQ), and well-being self-assessment questionnaire. The investigator reviewed several research literatures and prepared the tools with experts' guidance.

Tool 1: Socio- Demographic Proforma

Socio- personal profile of the study included the details regarding the study participant's age, education, religion, residence, type of family, occupation, monthly family income, number of children, duration of married life, migrant husband, place of male partner migrated, duration of migration after marriage, frequency of contact with the partner, partner's last visit, dietary intake, habit of regular exercise.

Tool 2: Physical Health Assessment Questionnaire

Physical health assessment questionnaire is a semi-structured questionnaire includes four clinical parameters such as BMI, GRBS, blood pressure, and morbidities with varying score levels. The minimum score is 0 and maximum score is 28.

Scoring interpretation:

0 - Healthy
1 - 9 mild unhealthy
10 - 19 moderately unhealthy
20- 28 severely unhealthy

Tool 3: Mental Health Assessment Tool (DASS-21)

DASS-21 is a standardized instrument (depression, anxiety, and stress scale-21 items) assess the mental health includes the following domains depression, anxiety and stress level of women which is a 4-point likert scale (0 - Did not apply to me at all, 1 - Applied to me to some degree, or some of the time, 2 - Applied to me to a considerable degree or a good part of time, 3 - Applied to me very much or most of the time).

Depression – 7 items (3, 5, 10, 13, 16, 17, 21)
Anxiety – 7 items (2, 4, 7, 9, 15, 19, 20)
Stress level – 7 items (1, 6, 8, 11, 12, 14, 18)

Scoring interpretation:

Scores on the DASS-21 need to be multiplied by 2 to calculate the final score (table 1).

Table 1: Scoring interpretation of mental health assessment tool

	Depression	Anxiety	Stress
Normal	0-9	0-7	0-14
Mild	10-13	8-9	15-18
Moderate	14-20	10-14	19-25
Severe	21-27	15-19	26-33
Extremely severe	28+	20+	34+

Tool 4: Reproductive Health Assessment Questionnaire

Reproductive health assessment questionnaire is a semi-structured questionnaire includes 10 items with varying score levels. The minimum score is 0 and maximum score is 35.

Scoring interpretation:

0 - Healthy, 1-12 Mild unhealthy, 13-24 Moderate unhealthy, 25-35 Severe unhealthy

Tool 5: Well-being Self-Assessment Questionnaire

Well-being self-assessment tool is a standardized tool to assess the well-being of women. It is a 14 item 5-point likert scale (1 – none of the time, 2 – rarely, 3 – some of the time, 4 – often, and 5 – all of the time). Minimum score is 14 and the maximum score is 70.

Scoring interpretation:

14-32- Low well-being, 32 – 40- Below average well-being ,40 – 59 Average well-being
59 – 70- Above average well-being

Tool 6: NorVold Domestic Abuse Questionnaire (NORAQ)

The topics of abuse part 4-6 of NorVold domestic abuse questionnaire used here to assess the emotional (3 items), physical (3 items) and sexual abuse (4 items) total of 10 items. Scoring interpretation:

Emotional abuse and Physical abuse

0 – No abuse, 1 - mild abuse, 2 -moderate abuse, 3 - severe abuse

Sexual abuse

0 – No abuse, 1 -Mild abuse, no genital contact, 2 - Mild abuse, emotional/ sexual humiliation, 3 -Moderate abuse, genital contact, 4 - Severe abuse, penetration

Content validity of the tool:

To ensure the validity, content validity of the tool was done by a panel of experts from faculty of nursing, Obstetricians and a Malayalam expert [H.S.A Malayalam].

Translation of the tool:

The tools used in this study namely socio- demographic proforma, physical health assessment questionnaire, Mental health assessment tool, reproductive health assessment questionnaire, NorVold Domestic Abuse Questionnaire (NORAQ), and well-being self-assessment questionnaire. were translated to Malayalam and validated by a Malayalam expert [H.S.A Malayalam] after getting author permission.

Reliability of the tool:

The reliability of the tool were established by Cronbach's alpha, split half and test-retest methods. The reliability 'r' scores were >0.75 thus tools were found reliable to use in the study (table 2)

Table 2: Reliability of research tools

Tool	Reliability test	Name of the test	Reliability 'r' value
Tool 1: Physical health assessment questionnaire	Stability (Test Retest)	Karl-Pearson Correlation Coefficient	0.821
Tool 2: DASS 21 (mental health assessment tool)	Internal Consistency	Cronbach's alpha or Coefficient alpha	0.754
Tool 3: Reproductive health assessment questionnaire	Internal Consistency	Split-half method	0.903
Tool 4: NorVold Domestic Abuse Questionnaire (NORAQ)	Internal Consistency	Cronbach's alpha or Coefficient alpha	0.813
Tool 5: Well-being self-assessment questionnaire	Stability (Test Retest)	Karl-Pearson Correlation Coefficient	0.811

Pilot study

A pilot study was conducted from 09/01/2023 to 13/02/2023.in the Vamanapuram Block, in Thiruvananthapuram District among 75 subjects (10% of main study sample). There were no major modifications done in the tool after the pilot study. The study was found to be feasible.

Ethical consideration:

Human rights:

• Formal Permission was obtained from concerned authorities

• Content Validity was obtained from various experts in the field.

Dignity:

• Informed consent was obtained from the subjects related to the study purpose, type of data and procedures.

• The subjects were given full rights to withdraw from the study.

• The investigator's contact information was disseminated to all the samples

Confidentiality:

• Privacy and Confidentiality was maintained

Data collection procedures:

- Formal permission was obtained from the panchayath.
- Ethical clearance was from IEC (HRECWCON/002).

- Informed consent & willingness were obtained from the subjects
- Districts of Kerala divided in to 3 clusters – North, Middle and south with 5,5 and 4 districts respectively
- From each clusters one district selected by lottery method and from these 3 districts 3 blocks each selected by random sampling method
- 250 samples selected (women having Non-Migrant Male Partner - 125 and Migrant Male Partner – 125) from each districts by cluster sampling method with the help of ASHA workers.
- Each block 41-42 women having migrant and non-migrant male partner were selected by visiting their homes.
- Used trained research assistant to collect data in Wayanad and Ernakulam districts.
- 3 days training given to both research assistants, and they collected data from 3 subjects in the presence of the primary investigator.
- Researcher herself collected data from Trivandrum districts.
- Data collection started in the month of September and completed in the month of December 2023.
- Researcher spend 30-40 minutes to collect data from each subjects.

Table 3: Sample distribution in district wise

Districts	Block	Female Population	Women in reproductive age group	Samples by random sampling
Trivandrum	Kalpetta	16179	9763	83
	Mananthavady	17764	10282	83
	Panamaram	5760	3421	84
Ernakulam	Koovappady	13056	9432	84
	Vadavukode	18729	11413	83
	Vazhakkulam	9034	6482	83
Wayanad	Pothencode	7206	4381	83
	Vamanapuram	11385	8423	83
	Kilimanoor	8435	6325	84
			Total	**750**

Data analysis:

The collected data entered and analysed by using SPSS-V.22.

- Descriptive Statistics such as frequency, percentage, mean, and standard deviation were used for analysing the general health women.
- Inferential statistics such as chi square and student T test used to find out the association with selected sociodemographic variables.
- Karl Pearson correlation coefficient was used to find out the correlation between variables, physical, mental, sexual, reproductive health, and well-being of women of reproductive age group having migrant versus non migrant male partners.

CHAPTER IV
DATA ANALYSIS

The data were organized and analysed in relation to objectives and are presented in the form of tables and figures in this chapter under following sections.

Section 1: distribution of socio-demographic variables of women of reproductive age group having migrant versus non-migrant male partners
Section 2: comparison of general health and well-being of women of reproductive age group having migrant versus non-migrant male partners
Section 3: correlation between the general health and well-being of a women of reproductive age group having migrant versus non-migrant male partners
section 4: correlation between physical health, reproductive health and mental health of women of reproductive age group having migrant versus non-migrant male partners.
Section 5: association between general health and well-being with selected socio-demographic variables of women of reproductive age group having migrant versus non-migrant male partners
Section 6: Comparison of abuse among women of reproductive age group having migrant versus non-migrant male partners
Section 7: Impact of migrant versus non-migrant male partner in region wise

Section 1

Distribution of socio-demographic variables of women of reproductive age group having migrant and non-migrant male partners

Table 4: Frequency and percentage distribution of socio-demographic variables of women of reproductive age group having migrant and non-migrant male partners

n=750

Variable	Sub-variable	Women of reproductive age having				Chi-square value	p-value
		Migrant male partner (n=375)		Non-migrant male partner (n=375)			
		f	%	f	%		
Age in years	18-25	18	4.8	91	24.3	61.094	<0.001***
	26-33	78	20.8	60	16		
	34-41	159	42.4	147	39.2		
	42-49	120	32	77	20.5		
Education	Primary education	0	00	0	00	34.664	<0.001***
	Secondary education	105	28	54	14.4		
	Higher secondary	39	10.4	87	23.2		
	Degree & above	231	61.6	234	62.4		
Type of family	Nuclear	186	49.6	258	68.8	39.801	<0.001***
	Joint	171	45.6	117	31.2		
	Extended	18	4.8	0	00		
Occupation	Professional	99	26.4	80	21.3	33.440	<0.001***
	Government job	66	17.6	72	19.2		
	Private job	96	25.6	130	34.7		
	Self-employed	0	00	18	4.8		
	House wife	114	30.4	75	20		
Monthly family income	≤ 10000	0	00	0	00	323.148	<0.001***
	10001 - 20000	0	00	21	5.6		
	20001 - 30000	18	4.8	108	28.8		
	30001 – 40000	54	14.4	187	49.9		
	>40000	303	80.8	59	15.7		
Number of	0	0	00	21	5.6	30.046	<0.001***

children	1 2 3	114 225 36	30.4 60 9.6	121 179 54	32.3 47.7 14.4		
Duration of married life	≤ 3 yrs 4-7 yrs 8-11 yrs 12-15 yrs >15 yrs	18 36 42 201 78	4.8 9.6 11.2 53.6 20.8	91 39 60 54 131	24.3 10.4 16 14.4 34.9	150.368	<0.001***
Dietary habit	Vegetarian Non-vegetarian	0 375	00 100	21 354	5.6 94.4	21.605	<0.001***
Number of meals per day	3 meals a day Skipping meals with substitute Skipping meals without substitute	339 0 36	90.4 00 9.6	306 0 69	81.6 00 18.4	12.060	0.001**
Intake of fast food	Once in a week Twice in a week Thrice in a week >3 times in a week 2-3 times a month	99 111 0 18 147	26.4 29.6 00 4.8 39.2	155 94 36 0 90	41.3 25.1 9.6 00 24	81.465	<0.001***
Habit of regular exercise	Yes No	0 375	00 100	71 304	18.9 81.1	78.424	<0.001***
If yes		n=00		n=71			
Duration of exercise	< 30 minutes 30 – 1 hour	-	-	39 32	54.9 45.1	-	-
Frequency of exercise in a week	1-2 days 3-4 days 5 or more days	-	-	38 0 33	53.5 00 46.5	-	-
Type of exercise	Brisk walk Jogging Gym Swimming Other	-	-	0 0 18 32 21	00 00 25.4 45.1 29.6	-	-

*****Significant at p<0.001**

Table 4 illustrates the distribution of socio-demographic variables of women of reproductive age group having migrant and non-migrant male partners such as age in years, education, type of family, occupation, monthly family income, number of children, duration of married life, ownership of the house dietary habit and exercise pattern.

Overall, chi-square value and p-value shows the participants with migrant male partner and non-migrant male partner were significantly differs in terms of age, education, type of family, occupation, monthly income, number of children, duration of married life, dietary habit, number of meals per day and intake of fast food ($p<0.001$; $p<0.01$).

Table 5: Frequency and percentage distribution of migration status of male partner among women of reproductive age group

n=375

Variable	Sub-variable	Women of reproductive age group having Migrant male partner	
		f	%
Male partner migrated to	Middle east	291	77.6
	Europe	66	17.6
	Others	18	4.8
When did male partner migrated	Before marriage	150	40
	0-4 yrs	81	21.6
	5-8 yrs	144	38.4
Frequency of telephonic contact	Daily	237	63.2
	Once in 2 days	81	21.6
	Weekly twice	57	15.2
When was the last visit	<1 year	177	47.2
	1 year	198	52.8

Table 5 shows the distribution of migration status of migrant male partners of women in reproductive age group. Majority (77.6%) were migrated to middle east and about 40% were migrated before marriage. More than half (63.2%) of migrated male partners contact participants daily, and 52.8% of them have visited their spouse 1 year back.

Section 2

Comparison of General Health and Well-being of Women of Reproductive Age Group Having Migrant and non-migrant Male Partners **n=750**

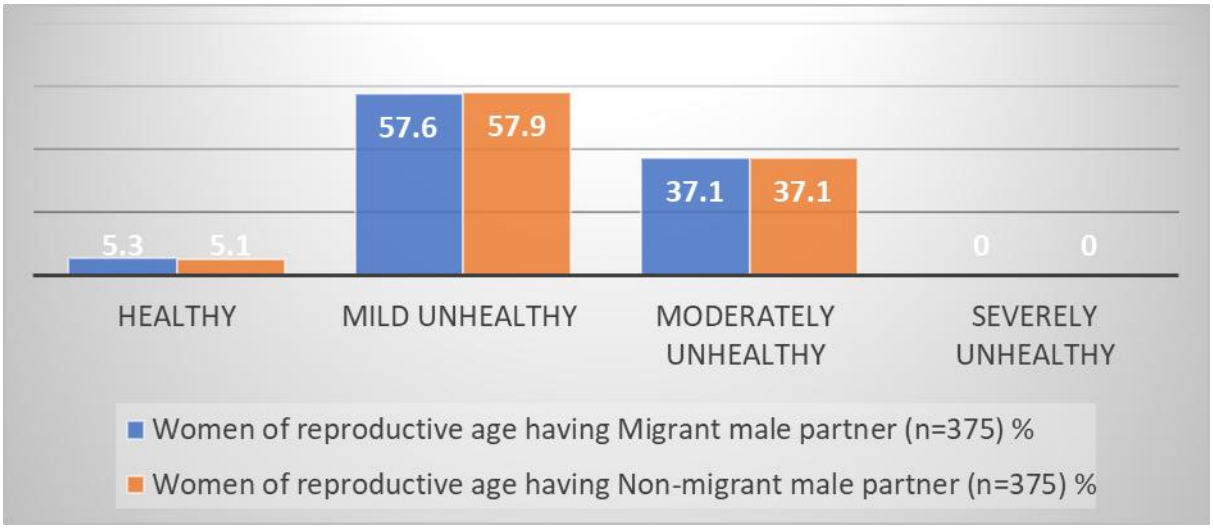

Figure 3: Percentage distribution of physical health of women of reproductive age group having migrant and non-migrant male partners

Figure 3 depicts distribution of physical health of women of reproductive age group having migrant and non-migrant male partner. Chi-square value and p-value shows both groups were similar and comparable ($p>0.05$).

Table 6: Frequency and percentage distribution of mental health of women of reproductive age group having migrant and non-migrant male partners. n=750

Mental health		Women of reproductive age group having				Chi-square value	p-value
		Migrant male partner (n=375)		Non-migrant male partner (n=375)			
		f	%	f	%		
Stress	Normal (1-14)	285	76	286	76.3	62.279	<0.001***
	Mild (15-18)	81	21.6	29	7.7		
	Moderate (19-25)	9	2.4	60	16		
	Severe (26-33)	0	00	0	00		
	Extremely severe (≥ 34)	0	00	0	00		
Anxiety	Normal (0-7)	348	92.8	217	57.9	137.435	<0.001***
	Mild (8-9)	27	7.2	70	18.7		
	Moderate (10-14)	0	00	72	19.2		
	Severe (15-19)	0	00	16	4.3		
	Extremely severe (≥ 20)	0	00	0	00		
Depression	Normal (0-9)	258	68.8	140	37.3	81.138	<0.001***
	Mild (10-13)	108	28.8	191	50.9		
	Moderate (14-20)	9	2.4	44	11.7		
	Severe (21-27)	0	00	0	00		
	Extremely severe (≥ 28)	0	00	0	00		

*****Significant at p<0.001**

Table 6 depicts distribution of mental health in terms of stress, anxiety, and depression among women of reproductive age group having migrant and non-migrant male partner. Chi-square value and p-value shows both groups were significantly differed in terms of stress, anxiety and depression (p<0.001).

. n=750

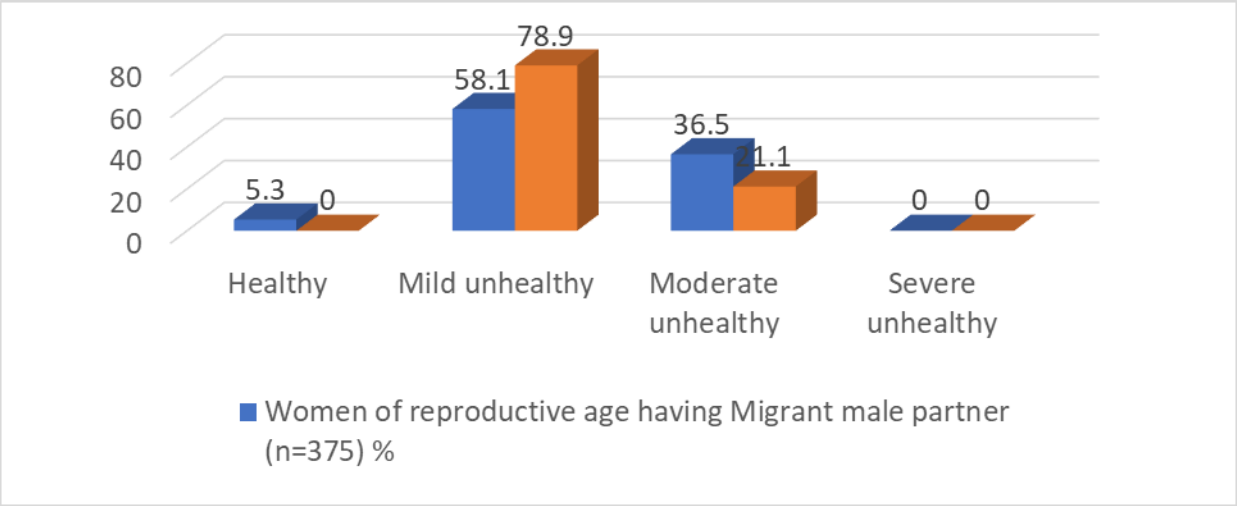

Figure 4: Percentage distribution of reproductive health of women of reproductive age group having migrant and non-migrant male partners

Figure 4 Depicts distribution of reproductive health of women of reproductive age group having migrant and non-migrant male partner. Majority (58.1% and 78.9%) of participant in both migrant and non-migrant male partner were mildly unhealthy and none of

them were severely unhealthy. Chi-square value and p-value shows both groups were significantly differed in terms of reproductive health (p<0.001).

n=750

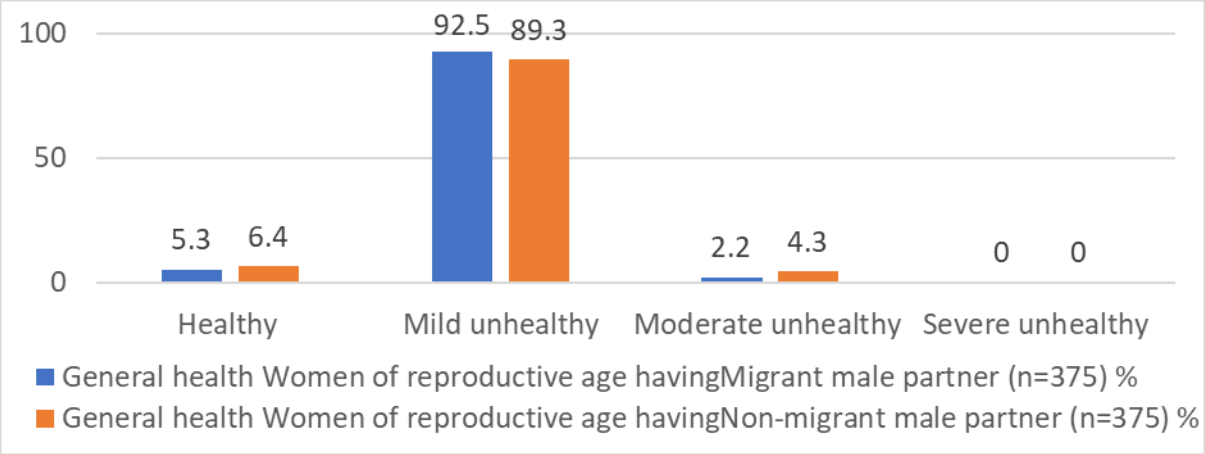

Figure 5: Percentage distribution of general health of women of reproductive age group having migrant and non-migrant male partners

Figure 5 Shows the Majority (92.5% and 89.3%) of participant in both migrant and non-migrant male partner were mildly unhealthy and none of them were severely unhealthy.

n=750

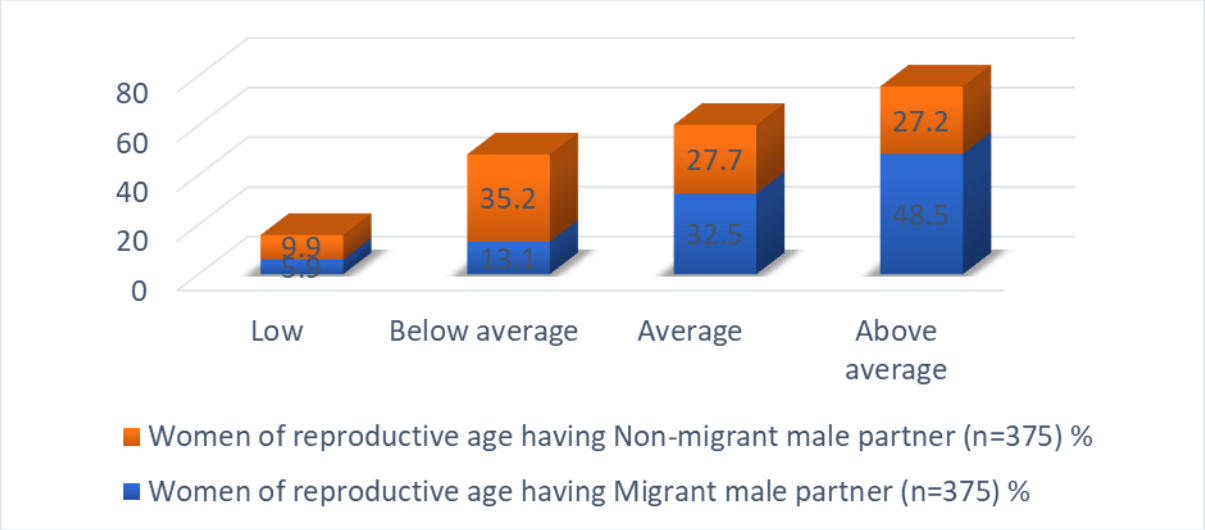

Figure 6: Percentage distribution of well-being of women of reproductive age group having migrant and non-migrant male partners

Figure 6 Shows Majority (48.5%) of women having migrant male partner and 27.2% of women having non-migrant male partner had above average well-being.

"H_1 – There is a significant difference in the general health (physical, mental, and reproductive health) and well-being of women of reproductive age group having migrant and non-migrant male partners."

Table 7: Mean difference of General health and well-being of women of reproductive age group having migrant and non-migrant male partners

n=750

Variables	Women of reproductive age group having				Mean difference	t- value	p-value
	Migrant male partner (n=375)		Non-migrant male partner (n=375)				
	Mean	SD	Mean	SD			
Physical health	9.35	4.230	9.35	4.205	0.00	0.000	1.000
Stress	11.00	4.247	9.59	5.181	1.41	4.085	<0.001***
Anxiety	5.45	1.687	6.93	3.241	1.47	7.814	<0.001***
Depression	7.12	3.592	9.47	3.594	2.35	8.962	<0.001***
Reproductive health	10.24	4.891	8.47	3.259	1.77	5.834	<0.001***
General health	43.18	8.043	43.83	9.206	0.65	1.018	0.309 NS
Well-being	60.16	15.575	48.61	16.047	11.55	10.003	<0.001***

*****Significant at p<0.001**

Table 7 shows, In physical health, the mean score was similar among participants with migrant and non-migrant male partner. The mean score stress among participants with migrant male partner was higher compared with non-migrant male partner which was highly significant ($p<0.001$). The mean scores of anxiety and depression among participants with migrant male partner was 5.45 ± 1.687; 7.12 ± 3.592 respectively which was lesser than participants with non-migrant male partner (6.93 ± 3.241; 9.47 ± 3.594) and the difference was significant ($p<0.001$). The mean scores of reproductive health and well-being among participants with migrant male partner was higher compared with non-migrant male partner and the difference was significant ($p<0.001$) Regarding general health, the mean score among participants with non-migrant male partner was higher compared with participants with migrant male partner which reveals no significant difference between both groups ($p>0.05$).

Hence, accept the research hypotheses in terms of stress, anxiety, depression, reproductive health and well-being ($p<0.001$) and reject the research hypotheses in terms of physical health and general health ($p>0.05$) of women of reproductive age group having migrant and non-migrant male partner.

Section 3

Correlation between the general health and well-being of a women of reproductive age group having migrant and non-migrant male partners

"H_2 – There is significant correlation between general health and well-being of women of reproductive age group having migrant and non-migrant male partners"

Table 8: correlation between general health and well-being of a women of reproductive age group having migrant and non-migrant male partners. n=750

Group	Variable	Mean	SD	Karl Pearson's r	p value
Group 1 (n=375)	General health	43.18	8.043	-0.255	<0.001***
	Well-being	60.16	15.575		
Group 2 (n=375)	General health	43.83	9.206	-0.057	0.273
	Well-being	48.61	16.047		

*****Significant at p<0.001**

Group 1: women of reproductive age group having migrant male partners

Group 2: women of reproductive age group having non migrant male partners

Table 8 depicts among group 1, there is significant negative correlation between general health and well-being (r -0.255; p<0.001). Hence accept research hypothesis as there is significant relationship between general health and well-being among participants with migrant male partner

Among group 2, there is non-significant negative correlation between general health and well-being (r -0.043; p>0.05). Hence reject research hypothesis as there is no significant relationship between general health and well-being among participants with non-migrant male partner.

section 4

Correlation between physical health, reproductive health and mental health of women of reproductive age group having migrant and non-migrant male partners.

H_3 -. There is a significant correlation between physical health, reproductive health and mental health of women of reproductive age group having migrant and non-migrant male partners.

Table 9: correlation between physical health, reproductive health and mental health of women of reproductive age group having migrant and non-migrant male partners.

n=750

Group	Variables	Physical health	Level of Stress	Level of anxiety	Depression	Reproductive health
		'r' p-value	'r' p-value	'r' p-value	'r' p-value	'r' p-value
Group 1 (n=375)	Physical health					
	Level of stress	0.000 0.998				
	Level of anxiety	-0.088 0.090	-0.052 0.315			

	Depression	-0.109 0.034*	0.051 0.320	-0.036 0.493		
	Reproductive health	-0.127 0.014*	-0.146 0.005**	0.222 <0.001***	0.026 0.616	
Group 2 (n=375)	**Physical health**					
	Level of stress	-0.269 <0.001***				
	Level of anxiety	0.051 0.326	0.044 0.397			
	Depression	-0.110 0.034*	0.164 0.001**	-0.031 0.551		
	Reproductive health	0.434 <0.001***	-0.011 0.825	-0.057 0.274	0.114 0.028*	

*****Significant at p<0.001 **Significant at p<0.01 *Significant at p<0.05**

Group 1: women of reproductive age group having migrant male partners

Group 2: women of reproductive age group having non migrant male partners

Table 9 depicts the correlation between physical health, mental health and reproductive health of women of reproductive age group having migrant and non-migrant male partners.

Group 1 shows that, there is significant negative correlation between physical health and depression (r -0.109; p<0.05) which means even physically unhealthy, there is no depression. Also shows significant negative correlation between physical health and reproductive health (r -0.127; p<0.05) which inferred that even good in physical health there is unhealthy reproductive health. Further, there is significant week negative correlation between stress and reproductive health (r -0.146; p<0.01) which means increase in stress level there is corresponding decline in reproductive health. As anxiety increases there is corresponding increase in reproductive health score (unhealthy) which is significant (r 0.222; p<0.001).

Group 2 shows that, there is significant negative correlation between physical health and depression (r -0.110; p<0.05) which means even physically unhealthy, there is no depression. Also, significant positive correlation between physical health and reproductive health (r 0.434; p<0.001) when they are physically healthy, there reproductive health also better. Followed by, significant positive correlation between stress and depression (r 0.164; p<0.01) which inferred that a change in stress level there is corresponding change in depression. Similarly, there is significant week positive correlation between depression and reproductive health (r 0.114; p<0.05) inferred that change in depression there is corresponding change in reproductive health.

Section 5

Association between general health and well-being with selected socio-demographic variables of women of reproductive age group

"$H_{4.1}$- There is significant association between general health with selected socio demographic variables of women of reproductive age group having migrant and non-migrant male partners"

Table 10: Association between general health with selected socio-demographic variables of women of reproductive age group

n=750

Variable	Sub-variable	General health			Chi-square value	df	p-value
		Healthy	Mild unhealthy	Moderately unhealthy			
Age in years	18-25	7	94	8	12.403	6	0.054 NS
	26-33	13	123	2			
	34-41	13	285	8			
	42-49	11	180	6			
Education	Secondary education	10	147	2	8.411	4	0.078 NS
	Higher secondary	3	121	2			
	Degree & above	31	414	20			
Religion	Hindu	19	251	5	7.377	4	0.117
	Christian	19	240	12			
	Islam	6	191	7			
Residence	Urban	16	236	7	0.372	2	0.830 NS
	Rural	28	446	17			
Type of family	Nuclear	35	398	11	10.986	4	0.027* S
	Joint	9	266	13			
	Extended	0	18	0			
Occupation	Professional	18	157	4	13.923	8	0.084 NS
	Government job	8	125	5			
	Private job	12	203	11			
	Self-employed	0	17	1			
	House wife	6	180	3			
Monthly family income	10001 - 20000	4	16	1	10.527	6	0.104 NS
	20001 - 30000	4	119	3			
	30001 – 40000	11	221	9			
	>40000	25	326	11			
Number of children	0	4	16	1	14.667	6	0.023* S
	1	18	208	9			
	2	22	371	11			
	3	0	87	3			
Duration of married life	$\leq$ 3 yrs	7	97	5	7.338	8	0.501 NS
	4-7 yrs	6	65	4			
	8-11 yrs	9	91	2			
	12-15 yrs	13	237	5			
	>15 yrs	9	192	8			
Ownership of the house	Owned	31	520	19	0.896	2	0.639 NS
	Rented	13	162	5			

***Significant at p<0.05**

Table 10 shows that, there is significant association between general health with type of family and number of children ($p<0.05$). Hence, reject research hypothesis as there is no significant association between physical health with sociodemographic variables except type of family and number of children.

$H_{4.2}$ - There is significant association between well-being with selected socio demographic variables of women of reproductive age group having migrant and non-migrant male partners

Table 11: Association between well-being with selected socio-demographic variables of women of reproductive age group

N=750

Variable	Sub-variable	Well-being				Chi-square value	df	p-value
		Low	Below average	Average	Above average			
Age in years	18-25	10	42	31	26	64.496	9	<0.001***
	26-33	10	23	20	85			
	34-41	31	65	112	98			
	42-49	8	51	63	75			
Education	Secondary education	1	23	46	89	58.790	6	<0.001***
	Higher secondary	8	37	22	59			
	Degree & above	50	121	158	136			
Religion	Hindu	24	69	58	124	22.782	6	0.001**
	Christian	16	58	98	99			
	Islam	19	54	70	61			
Residence	Urban	23	61	88	87	4.422	3	0.219
	Rural	36	120	138	197			
Type of family	Nuclear	32	104	126	182	18.988	6	0.004**
	Joint	27	77	88	96			
	Extended	0	0	12	6			
Occupation	Professional	16	35	61	67	28.849	12	0.004**
	Government job	11	35	28	64			
	Private job	16	64	85	61			
	Self-employed	2	2	5	9			
	House wife	14	45	47	83			
Monthly family income	10001 - 20000	1	10	6	4	47.184	9	<0.001***
	20001 - 30000	14	36	38	38			
	30001 – 40000	28	74	68	71			
	>40000	16	61	114	171			
Number of children	0	1	10	6	4	19.621	9	0.020*
	1	19	59	61	96			
	2	25	91	134	154			
	3	14	21	25	30			
Duration of married life	≤ 3 yrs	10	27	43	29	74.565	12	<0.001***
	4-7 yrs	4	27	9	35			
	8-11 yrs	8	24	21	49			
	12-15 yrs	13	43	116	83			
	>15 yrs	24	60	37	88			
Ownership of the house	Owned	38	131	151	250	38.632	3	<0.001***
	Rented	21	50	75	34			

***Significant at p<0.05** ****Significant at p<0.01** *****Significant at p<0.001**

Table 11 shows that, there is significant association between well-being with age in years, education, religion, type of family, occupation, monthly family income, number of children, duration of married life, and ownership of the house ($p<0.05$; $p<0.01$; $p<0.001$).

Hence, accept the research hypothesis as there is significant association between well-being with sociodemographic variables such as age in years, education, religion, type of family, occupation, monthly family income, number of children, duration of married life, and ownership of the house.

Section 6

Comparison of abuse among women of reproductive age group having migrant and non-migrant male partners

Table 12: Frequency and percentage distribution of emotional abuse among women of reproductive age group having migrant and non-migrant male partners. n=750

Emotional abuse	Women of reproductive age group having				Chi-square value	p-value
	Migrant male partner (n=375)		Non-migrant male partner (n=375)			
	f	%	f	%		
No abuse	114	30.4	92	24.5	9.853	0.020*
Mild abuse	180	48	187	49.9		
Moderate abuse	72	19.2	94	25.1		
Severe abuse	9	2.4	2	0.5		

***Significant at p<0.05**

Table 12 illustrates a greater number of women having migrant male partner reported no emotional abuse (30.4%) and severe emotional abuse (2.4%) compared to women having non-migrant male partner which was 24.5% and 0.5% respectively. Chi-square value and p-value shows both groups were significantly differed in terms of emotional abuse ($p<0.05$).

Table 13: Frequency and percentage distribution of physical abuse among women of reproductive age group having migrant and non-migrant male partners n=750

Physical abuse	Women of reproductive age group having				Chi-square value	p-value
	Migrant male partner (n=375)		Non-migrant male partner (n=375)			
	f	%	f	%		
No abuse	77	20.5	51	13.6	7.847	0.049*
Mild abuse	159	42.4	169	45.1		
Moderate abuse	130	34.7	139	37.1		
Severe abuse	9	2.4	16	4.3		

***Significant at p<0.05**

Table 13 illustrates a greater number of women having migrant male partner reported no physical abuse (20.5%) compared to women having non-migrant male partner which was 13.6%. Chi-square value and p-value shows both groups were significantly differed in terms of physical abuse ($p<0.05$).

Table 14: Frequency and percentage distribution of sexual abuse among women of reproductive age group having migrant and non-migrant male partners n=750

Sexual abuse	Women of reproductive age group having				Chi-square value	p-value
	Migrant male partner (n=375)		Non-migrant male partner (n=375)			
	f	%	f	%		
• No abuse	15	04	15	04	36.005	<0.001***
• Mild without genital contact	59	15.8	127	34		
• Mild with sexual humiliation	169	45.2	145	38.8		
• Moderate with genital contact	102	27.3	71	19		
• Severe abuse	29	7.8	16	4.3		

*****Significant at p<0.001**

Table 14 illustrates 27.3% of participants having migrant male partner experienced moderate sexual abuse with genital contact whereas 34% of participants having non-migrant male partner experienced mild sexual abuse without genital contact. Chi-square value and p-value shows both groups were significantly differed in terms of sexual abuse (p<0.001).

CHAPTER V
DISCUSSION

The chapter deals with the discussion of the present study results with the similar studies done accordingly to the objectives.

Objective 1: To determine the impact of migrant versus non migrant male partner on general health (physical, mental and reproductive health) and well-being of women of reproductive age group.

Physical Health

There was no significant difference in physical health between women with migrant and non-migrant male partners (mean = 9.35, SD = 4.230 for both groups, p = 1.000). The absence of a significant difference suggests that migrant male partners' financial contributions may mitigate the impact of physical absence.

This result aligns with findings from a study explores the Impact of Men's Labour Migration on Non-migrating Spouses' Health. The findings revealed that, physical health is largely unaffected due to remittances providing better access to healthcare and nutrition. Self-reported health status was not significantly different between women with and without migrant spouse (mean = 0.935, SD= 0.147; mean=0.927, SD= 0.146 respectively).[22]

Mental Health

Significant differences in mental health were found between women with migrant and non-migrant partners. Women with non-migrant partners had higher levels of stress (mean = 9.59, SD = 5.181), anxiety (mean = 6.93, SD = 3.241), and depression (mean = 9.47, SD = 3.594) compared to those with migrant partners ($p < 0.001$). The results suggest that financial remittances play a protective role in mental health, especially in reducing anxiety and depression. The absence of a spouse might reduce daily marital conflicts, leading to lower stress levels.

In contrary, a study on issues faced by women in male out-migrant households on sociopersonal, economic, and psychological problems revealed that, migrant wives undergo psychological problems like feeling insecure due to absence of husbands (68.00%), emotional stress (60.00%), not wanting to participate alone in social functions (54.50%) and feeling of anxiety or depression (49.00%).[23]

Reproductive Health

Significant differences were observed in reproductive health, with women with non-migrant partners reporting better reproductive outcomes (mean = 8.47, SD = 3.259) compared to those with migrant partners (mean = 10.24, SD = 4.891) ($p < 0.001$). The lower reproductive health among women with migrant partners may reflect the challenges of accessing healthcare in the absence of a spouse. While financial remittances improve general health, reproductive health may still suffer due to delayed care or irregularity in spousal visits.

Literature supports this result, indicating that male migration worsens reproductive health for left-behind women, yet increases access to reproductive health institutions through remittances, indicating a complex relationship between migrant status and women's physical health. The reproductive problem expressed were unable to visit gynaecologists (45.50%), delayed conception (30.50%) and less sexual satisfaction (15.50%).[23]

Well-being

Women with migrant male partners reported higher levels of overall well-being (mean = 60.16, SD = 15.575) compared to those with non-migrant male partners (mean = 48.61, SD

= 16.047) ($p < 0.001$). The higher well-being scores among women with migrant partners can be attributed to the economic stability provided by remittances. The absence of daily conflicts with a spouse may also contribute to increased well-being. However, the emotional toll of separation, while present, appears to be offset by the financial advantages in this study

This finding resonates with previous research Examines long-term effects of men's migration on women's well-being which found that migrant male partners positively influence women's material security (OR = 2.3) and life satisfaction through remittances (OR = 1.03), while non-migrant partners may not provide similar benefits, highlighting the complexities of migration's impact on women's well-being.[24]

Objective 2:To correlate the General health with well-being of a women of reproductive age group having migrant versus non migrant male partners

No significant correlation was found between physical health and stress in women with migrant partners ($r = 0.000$, $p = 0.998$), while a significant negative correlation was found in women with non-migrant partners ($r = -0.269$, $p < 0.001$). The negative correlation in women with non-migrant partners suggests that physical health worsens as stress increases, highlighting the interconnectedness of mental and physical health.

This result aligns with findings on the health impacts of migration on women who remain behind when their husbands migrate. The physical health impacts of migration on wives were mixed, with some indicating better health outcomes for migrant wives, while others reported negative effects such as increased hypertension and obesity (37%). Regarding mental health, 3.1% left-behind women had mental health risk and 6% of left-behind women exhibited mild or moderate depression compared to their counterparts living with spouses. Frequent communication with migrant husbands and receiving remittances were identified as protective factors that could mitigate mental health risks among these women.[22]

Objective 3.To correlate between physical, reproductive health and mental health of a women of reproductive age group having migrant versus non migrant male partners

A significant positive correlation was observed between reproductive health and anxiety in women with migrant partners ($r = 0.222$, $p < 0.001$), indicating that poorer reproductive health is associated with higher anxiety levels. The strong correlation between reproductive health and anxiety highlights the need for integrated care models that address both reproductive and mental health issues in women with migrant partners. Programs that offer telemedicine or community health services could reduce the anxiety associated with reproductive health concerns during periods of spousal absence.

This finding is consistent with the study on The Impact of Spousal Migration on the Mental Health of Nepali Women: A Cross-Sectional Study" investigates the mental health risks faced by women whose spouses have migrated for work. study variables were significantly correlated with outcomes Loneliness and Mental Health. Also, there were a positive and significant correlation between marital relationship quality and frequency of contact ($r = .33$, $p < .01$)[25]

Objective 4.To associate the general health (physical, mental and reproductive health) and well-being among women of reproductive age group having migrant versus non migrant male partners with their socio demographic variables

The study explored a range of sociodemographic variables (age, education, religion, residence, family type, occupation, income, number of children, and duration of married life) and their association with the general health, mental health, reproductive health, and well-being of women with migrant and non-migrant partners.

There is significant association between general health with type of family and number of children ($p<0.05$). Hence, accept null hypothesis as there is no significant association between physical health with sociodemographic variables except type of family and number of children.[25]

SECONDARY OBJECTIVES

1. To assess the impact of migrant versus non-migrant male partner on domestic abuse among women of reproductive age group

Although the study did not directly measure domestic violence, the higher levels of stress, anxiety, and depression among women with non-migrant partners suggest a potential link. These findings suggest the need for mental health and domestic violence prevention programs targeted at women with non-migrant partners. Future research should directly assess the relationship between mental health outcomes and domestic violence risk in this population.

A study on factors associated with intimate partner violence (domestic violence) perpetration among migrant men indicate that over 27% of women aged 15 to 49 have experienced physical and/or sexual abuse by a current or former intimate partner. This highlights the pervasive nature of the issue across different cultures and regions. Women with migrant life partner often face higher rates of victimization, with prevalence estimates ranging from 17% to 70.5%. The intersection of migration, cultural adjustment, and socioeconomic stressors can exacerbate the risk of domestic violence, making it crucial to understand these factors in prevention and intervention efforts.[27]

CHAPTER VI
SUMMARY, CONCLUSION, RECOMMENDATIONS & LIMITATIONS

Summary of the Study

This research explored the impact of male partner migration on the general health (physical, mental, and reproductive) and well-being of women of reproductive age group, with a comparison between those with migrant and non-migrant male partners. The study was conducted on 750 women, with equal representation from both groups. The analysis focused on correlations between physical, reproductive, and mental health and investigated the role of socio-demographic variables in shaping health outcomes. Key aspects such as stress, anxiety, depression, and reproductive health were examined in relation to the migration status of male partners. The research was driven by the following primary objectives:

1.To determine the impact of migrant versus non migrant male partner on general health (physical, mental and reproductive health) and well-being of women of reproductive age group.

2.To correlate the General health with well-being of a women of reproductive age group having migrant versus non migrant male partners

3.To correlate between physical, reproductive health and mental health of a women of reproductive age group having migrant versus non migrant male partners

4.To associate the general health (physical, mental and reproductive health) and well-being among women of reproductive age group having migrant versus non migrant male partners with their socio demographic variables

The findings were analyzed in detail, and several significant associations were discovered that provide insights into the complex dynamics of male partner migration on women's health.

Physical Health

The study revealed no significant difference in physical health between women with migrant and non-migrant male partners. Both groups were primarily categorized as "mildly unhealthy," which contradicts some prior research that associates male partner absence with worse physical health. This finding suggests that remittances and support networks might play a role in maintaining physical health, even in the absence of a spouse.

Mental Health

Mental health outcomes significantly differed between the two groups. Women with non-migrant partners reported higher levels of anxiety, stress, and depression, while those with migrant partners had comparatively lower mental health issues. This finding contrasts with traditional assumptions that spousal separation negatively impacts mental health. The results suggest that economic stability from remittances and reduced interpersonal conflict may contribute to better mental health among women with migrant partners.

Reproductive Health

Women with non-migrant partners exhibited significantly better reproductive health than those with migrant partners. The absence of a male partner could lead to delays in accessing reproductive healthcare services, as well as reduced regularity in healthcare check-ups. This finding emphasizes the need for healthcare interventions that specifically target women whose partners are away for long periods.

Well-being

Women with migrant partners reported higher levels of overall well-being, driven primarily by financial security and fewer day-to-day conflicts with their partners. In contrast, women with non-migrant partners, while physically present with their spouses, experienced lower levels of well-being, likely due to ongoing marital strains or financial instability.

Correlations Between Health Variables

There was a significant correlation between mental and reproductive health, particularly among women with non-migrant partners, highlighting the intersection between emotional stress and reproductive health issues. However, no significant correlation was found between physical and mental health among women with migrant partners, potentially due to the buffering effects of financial remittances.

Socio-Demographic Variables

Income and family structure were found to be strongly associated with health outcomes. Higher income, particularly from remittances, was linked to better health and well-being, while women in nuclear families faced higher levels of stress and poorer health outcomes compared to those in joint or extended families. This underscores the importance of socio-economic factors in shaping health outcomes for women in both groups.

Summary of key findings

1. **Physical Health and General Health:** No significant differences based on migrant status of the male partner.
2. **Stress, Anxiety, and Depression:** Participants with non-migrant male partners tend to experience higher levels of stress, anxiety, and depression, particularly in Ernakulam and Trivandrum. These differences are statistically significant.
3. **Reproductive Health:** Participants with migrant male partners have significantly better reproductive health, with the largest differences in Trivandrum and Ernakulam.
4. **Well-being:** Participants with migrant male partners generally report better well-being, especially in Trivandrum and Wayanad, with statistically significant differences.

Implications of the Findings

1. Nursing Administration

Nursing administrators should prioritize mental health services for women with non-migrant partners who are at risk of higher stress, anxiety, and depression

2. Nursing education

Nursing education should highlight the impact of male partner migration on women's health into curricula. This will equip future nurses with an understanding of the socio-economic and psychological dimensions that influence health outcomes

3. Nursing Service

Nurses in clinical practice should adopt a holistic approach to assessing women's health, particularly migrant partners. This includes physical health mental health screenings, reproductive health evaluations, and inquiries into social and family dynamics. Routine screening for anxiety, stress, and depression should be incorporated into clinical check-ups

4. Nursing Research

Future research could focus on exploring long-term effects and developing interventions for women left behind. Nursing researchers can use findings by conducting longitudinal studies to assess the long-term impacts of male partner migration on physical, mental, and reproductive health.

LIMITATIONS

Impact Measurement Limitations: The study aims to assess the impact of migrant versus non-migrant male partners on various aspects of women's health and well-being. Accurately measuring the impact of a partner's migration status on physical, mental, and reproductive health can be challenging due to the multifaceted nature of these outcomes and the influence of numerous confounding factors

Subjectivity in Health Assessments: Assessments of physical, mental, and reproductive health may be subject to subjective reporting. Women's perceptions of their health and well-being can be influenced by personal biases, cultural attitudes, and social expectations, which may affect the reliability of the data.

Confounding Factors: Socio-demographic variables such as income, education, employment status, and support systems can significantly affect health outcomes. Failing to control for these variables might obscure the true impact of having a migrant versus non-migrant partner on women's health and well-being.

RECOMMENDATIONS FOR RESEARCH DESIGN AND METHODOLOGY

1. Consider using a longitudinal design to track changes in health and well-being over time. This approach can provide insights into how the presence or absence of a migrant partner affects women's health and well-being over different stages.
2. Include qualitative data collection methods to gain deeper insights into the personal experiences and challenges faced by women with migrant versus non-migrant partners. This can complement quantitative findings and provide a richer understanding of the context.
3. Develop educational programs to raise awareness about the unique challenges faced by women with migrant partners. These programs should aim to provide information on managing health and accessing resources effectively.
4. Design and test interventions aimed at mitigating the negative impacts identified in the study. Evaluate the effectiveness of these interventions in improving health and well-being among women with migrant partners.

CONCLUSION

The migrant status of male partners appears to have a **more significant impact on mental health (stress, anxiety, depression)** and **well-being** compared to physical health or general health. **Non-migrant male partners** are associated with poorer mental health outcomes (higher anxiety, depression, and stress), while **migrant male partners** seem to be associated with better reproductive health and well-being, particularly in **Trivandrum** and **Wayanad**. The impact varies by region, with **Ernakulam** showing slightly different patterns.

REFERANCES

1. Human Migration in India [Internet]. Drishti IAS. 2019. Available from: https://www.drishtiias.com/to-the-points/paper1/human-migration-in-india
2. Lőrincz L, Németh B. How Social Capital is Related to Migration Between Communities? European Journal of Population. 2022 Sep 15;
3. Rajan SI. India Migration Report 2020: Kerala Model of Migration Surveys [Internet]. Routledge & CRC Press. 2020. Available from: https://www.routledge.com/India-Migration-Report-2020-Kerala-Model-of-Migration Surveys/Rajan/p/book/9780367625696
4. Keshari J, Ravi R, Member. A study on In-migration, Informal Employment and Urbanization in Kerala [Internet]. 2021 Mar. Available from: https://spb.kerala.gov.in/sites/default/files/inline-files/In-migrationEmploymnt.pdf
5. India Migration Report 2020: Kerala Model of Migration Surveys. - IIMAD | The International Institute for Migration & Development [Internet]. IIMAD. 2021 [cited 2024 May 22]. Available from: https://iimad.org/publications/india-migration-report-2020-kerala-model-of-migration-surveys-2/
6. The Mass Exodus of Gulf Migrants and its Effect on the Socio-Economic Life of Kerala during COVID 19 Pandemic Kerala Institute of Labour and Employment (KILE) Government of Kerala Thiruvananthapuram [Internet]. 2022. Available from: https://kile.kerala.gov.in/wp-content/uploads/2023/04/Mass-Exodus-of-Migrants-Full-edited-final-report.pdf
7. Singh R. Origin of World's Largest Migrant Population, India Seeks to Leverage Immigration [Internet]. migrationpolicy.org. 2022. Available from: https://www.migrationpolicy.org/article/india-migration-country-profile
8. Lei L, Desai S. Male out-migration and the health of left-behind wives in India: The roles of remittances, household responsibilities, and autonomy. Social Science & Medicine. 2021 Jul; 280:113982.
9. Green SH, Wang C, Ballakrishnen SS, Brueckner H, Bearman P. Patterned remittances enhance women's health-related autonomy. SSM - Population Health. 2019 Dec; 9:100370.
10. Samanta R, Munda J. Husband's migration status and contraceptive behaviors of women: evidence from Middle-Ganga Plain of India. BMC Women's Health. 2023 Apr 15;23(1).
11. Aryal N, Regmi PR, van Teijlingen E, Trenoweth S, Adhikary P, Simkhada P. The Impact of Spousal Migration on the Mental Health of Nepali Women: A Cross-Sectional Study. International Journal of Environmental Research and Public Health. 2020 Feb 17;17(4):1292.
12. World Economic Forum. Migration and Its Impact on Cities In collaboration with PwC [Internet]. 2017. Available from: https://www3.weforum.org/docs/Migration_Impact_Cities_report_2017_low.pdf
13. Shattuck D, Wasti SP, Limbu N, Chipanta NS, Riley C. Men on the move and the wives left behind: the impact of migration on family planning in Nepal. Sexual and Reproductive Health Matters. 2019 Jan 1;27(1):248–61.
14. Roy A, Bhagat R, Das K, Sarode S. A Report on [Internet]. 2021 [cited 2024 May 23]. Available from: https://www.iipsindia.ac.in/sites/default/files/Project_Report_MGP.pdf

15. Das B, Prasad S. Male Out-Migration and Left-Behind Women in Uttar Pradesh, India. Springer eBooks. 2022 Jan 1;221–38.
16. Gonzalo A. Sister Callista Roy - Adaptation Model of Nursing - Nurseslabs [Internet]. Nurseslabs. 2021. Available from: https://nurseslabs.com/sister-callista-roys-adaptation-model/
17. Sznajder KK, Wander K, Mattison S, Medina-Romero E, Alam N, Rubhana Raqib, et al. Labor migration is associated with lower rates of underweight and higher rates of obesity among left-behind wives in rural Bangladesh: a cross-sectional study. Globalization and health. 2021 Jul 18;17(1).
18. Shattuck D, Wasti SP, Limbu N, Chipanta NS, Riley C. Men on the move and the wives left behind: the impact of migration on family planning in Nepal. Sexual and Reproductive Health Matters. 2019 Jan 1;27(1):248–61.
19. Jin Y, Qin Q, Zhan S, Yu X, Liang L, Huang F. Depressive Symptoms Were Prevalent Among Left-Behind Women in Ma'anshan, China. Journal of Nervous & Mental Disease. 2016 Mar;204(3):226–32.
20. Wrigley-Asante C, Agandin JBA. From Sunrise to Sunset: Male Out-Migration and Its Effect on Left-Behind Women in the Builsa District of Ghana. Gender Issues. 2015 Feb 25;32(3):184–200.
21. McIlwaine C. Not as safe as houses: experiences of domestic violence among international migrant women. Edward Elgar Publishing eBooks. 2023 Mar 17;232–48.
22. Manandhar S, Simkhada P, Brown P, van Teijlingen E. Impact of Men's Labour Migration on Non-migrating Spouses' Health: A Systematic Review. 2023 May 13 [cited 2023 Nov 21]; Available from: https://www.qeios.com/read/BX9WFC/pdf
23. Chandawari V, Nagnur S. Problems Faced by Women in Male out Migrant Households. International Journal of Current Microbiology and Applied Sciences. 2019 Nov 10;8(11):1141–6.
24. Agadjanian V, Chae S. Long-term Consequences of Men's Migration for Women's Well-being in a Rural African Setting. Sociological Perspectives. 2023 Jul 8;66(6):1084–102.
25. Sotomayor-Peterson M, Lucero-Liu AA. Correlates of mental health and well-being for Mexican female partners of migrants. International Journal of Migration, Health and Social Care. 2017 Dec 11;13(4):361–73.

ANNEXURE I
ETHICAL CLEARANCE CERTIFICATE

WELCARE COLLEGE OF NURSING
MULANTHURUTHY

Institutional Human Ethics Committee

Chairperson
Prof. Renu Susan Thomas

Member Secretary
Mrs. Rasija R

Medical Person
Dr. Vipin Mohan P.M

Legal Expert
Adv. Noel Joseph

Social Worker
Ms. Aleena George

Lay Person
Mr. Eldho

Vice Principal
Prof. Biji Mathew

Statistician
Dr. Kalesh M Karun

HOD- OBG Nursing
Mrs. Neethu George

HOD- Mental Health Nursing
Mrs. Reshma P Mohanan

HOD- Child Health Nursing
Mrs. Finu M Paul

Date: 25/06/2021

To,

Prof. Bindu C G
PhD. Scholar
Sree Balaji Vidhyapeeth University,
Puthucherry

Ref : Proposal dated 18/06/2021
Sub : Ethical Clearance

Dear Prof. Bindu C G,

As our Institutional Human Ethics Committee has reviewed your proposal to the conditions placed upon the ethical approval and also which is based upon your presentation dated 23rd June 2021. The committee concluded that there was no aspect of human violation in this project. The committee recommended to consider the participants privacy during data collection.

Approval Number	HRECWCON/002
Project Title	Impact of migrant vs non migrant male partner on general health and wellbeing of women in reproductive age group – A descriptive comparative study
Approval Date	25/06/2021
HREC Decision	**Approved**

Full ethical approval has been granted by the Institutional Human Ethics Committee- Welcare College of Nursing by the following standard conditions.

a. Provide a progress report for every year of approval.
b. Provide a final report when the project is complete.
c. Advice in writing if the project has been discontinued.

WELCARE COLLEGE OF NURSING VETTICKAL P.O PAMPRA MULANTHURUTHY(VIA) ERNAKULAM

Chairperson
Prof. Renu Susan Thomas

PRINCIPAL
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ANNEXURE II
CLEARANCE CERTIFICATE OF PART I EXAM

SRI BALAJI VIDYAPEETH
Examinations

OFFICE OF THE CONTROLLER OF EXAMINATIONS
Dr. **S. SRIRANGARAJ**
Controller of Examinations

Date: 14-03-2022

No. SBV/COE/Ph.D/Feb-22/A5

UNIVERSITY MEMORANDUM

Sub : Sri Balaji Vidyapeeth – Ph.D Degree in Part – I Methodology Written Examination - February 2022 – Results Notified.

* * * * *

Mr/Mrs/Dr. **BINDU C.G,** UIN. **1905002033** Research Scholar in Nursing (Part Time - External) is declared to have passed the Ph.D Part-I – Methodology Examination held in February 2022 and he/she is permitted to continue the research under the guidance of Dr. **HELEN SHAJI** and submit the thesis for the award of Ph.D Degree as per the regulations of SBV.

Sl. No.	Subjects	Result Status
1	PAPER - I RESEARCH METHODOLOGY AND PROTOCOL	**PASS**
2	PAPER - II ON CHOSEN FIELD OF RESEARCH	**PASS**

S. Sriranga raj
CONTROLLER OF EXAMINATIONS

To : Mr/Mrs/Dr. **BINDU C.G** through the Guide, SSSCON

Through : Dr. HELEN SHAJI, The Principal, SSSCON

CC : The Guide.

ANNEXURE III
DATA COLLECTION COMPLETION CERTIFICATE

SREE GOKULAM
NURSING COLLEGE
Venjaramoodu. PO, Trivandrum – 695607
ph: 0472- 3041270, 3041234 E-mail: sgnc@sgmc.in

24.10.2024

The Registrar
Sri Balaji Vidyapeeth University
Pondicherry

Respected Sir,

Sub: Data collection completion for PhD study of Ms. Bindu C G reg: -

With reference to the subject cited above, I would like to inform you that **Ms. Bindu C G** is a PhD scholar of Sri Balaji Vidyapeeth University. The title of her research study is **"Impact of Migrant Vs Non-Migrant Male Partner on General Health and Well Being of Women in Reproductive Age Group- A Descriptive Comparative Study".**
Ms Bindu C G has completed her data collection for the research in 3 districts of Kerala state, namely Trivandrum, Wayanad and Ernakulam under my supervision as a Co-Guide. The data was collected from 750 participants starting from in the month of September 2023 and completed in the month of December 2023.

Thanking You

Dr Haseena T A
Professor

Dr. Haseena.T.A
Professor & HOD
Dept. of Medical Surgical Nursing
Sree Gokulam Nursing College
Venjaramood, Trivandrum